Amendments to the Specification:

Please replace the paragraph beginning on page 23, line 17, with the following amended paragraph:

When a determination is made ~~instruction cache **300** determines~~ that an instruction associated with an indicator is present in instruction cache **300**, a signal is sent to indicate that a marked instruction is being executed. In these examples, a marked instruction is an instruction associated with a performance indicator. Alternatively, a performance indicator may indicate that all items or instructions in a bundle are marked to be counted. Additionally, signals for these instructions are sent ~~by instruction cache **300**~~ to the appropriate functional unit. Depending on the particular implementation, a functional unit other than performance monitor unit **306** may count execution of instructions. In the case that the performance indicators are in the instructions, or in the bundles, the indicators are detected within the cache unit, instruction cache **300**, ~~detects the indicators~~ and ~~sends~~ signals are sent to performance monitor unit **306**.

Please replace the paragraph beginning on page 32, line 6, with the following amended paragraph:

With reference next to **Figure 11**, a flowchart of a process for selective counting of instructions is depicted in accordance with a preferred embodiment of the present invention. The process illustrated in **Figure 11** may be implemented in conjunction with an instruction cache, such as instruction cache **214** in **Figure 2**.

Please replace the paragraph beginning on page 33, line 14, with the following amended paragraph:

With reference next to **Figure 12**, a flowchart of a process for selective counting of instructions is depicted in accordance with a preferred embodiment of the present invention. The process illustrated in **Figure 12** may be implemented in conjunction with an instruction cache, such as instruction cache **214** in **Figure 2**.

Please replace the paragraph beginning on page 34, line 6, with the following amended paragraph:

Turning now to **Figure 13**, a flowchart of a process for identifying instructions exceeding a threshold is depicted in accordance with a preferred embodiment of the present invention. The process illustrated in **Figure 13** may be implemented in conjunction with an instruction cache, such as instruction cache **214** in **Figure 2**.